



STATEMENT OF CONSIDERATIONS

REQUEST BY ENERGY CONVERSION DEVICES, INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-04NT42060; W(A)-04-026; CH-1195

The Petitioner, Energy Conversion Devices, Inc. (ECD) was awarded this cooperative agreement for the performance of work entitled, "Clean Hydrogen Technology for 3-Wheel Transportation in India." The purpose of the cooperative agreement is to develop and demonstrate a hydrogen/internal combustion engine (ICE) three-wheeled vehicle for use in India and other developing countries. The vehicle will be fueled with on-board hydrogen carried in proprietary Ovonic® hydrogen storage systems. ECD will work with a major Indian automotive company, Bajaj Auto Ltd. (BAL). BAL will supply the vehicles. ECD in collaboration with BAL will convert the vehicle's engine to run on hydrogen, and will integrate the hydrogen storage system into the vehicle. Most of this work will be performed at ECD facilities in Michigan. The waiver is directed only to inventions of ECD made under this cooperative agreement.

The total estimated cost of the cooperative agreement is \$1,440,849. The DOE share, through the United States Agency for International Development (USAID) is \$500,000. ECD's cost share is \$940,849 or 66%. According to the waiver petition, BAL is also contributing toward the cost share, in the amount of \$285,000. The period of performance is from February 2004 through January 2005.

In its response to question 5 of the attached waiver petition, ECD has described its technical competence in the field of vehicle hydrogen storage and delivery. ECD is the world leader in the science and technology of engineering solid-state metal hydrides for the storage and delivery of hydrogen. ECD has also developed significant expertise in the conversion of conventional gasoline engines to run on hydrogen fuel. Vehicles converted to run on hydrogen include two-wheelers (scooters) and hybrid hydrogen-battery four wheeled vehicles. ECD has an extensive portfolio of patents in these fields, and has attached a list of representative United States patent applications owned by ECD or its affiliates. ECD's response demonstrates its technical competency in the field of vehicle hydrogen storage and delivery.

In its response to question 10 of the attached waiver petition, ECD states that commercialization of the proposed technologies will stimulate healthy competition among various clean fuel technologies and contribute to economic growth. Other clean technologies are being commercialized, such as fuel cells, clean diesel fuel, pure electric vehicles and hybrid electric vehicles. Because the industry has been developing the technology for many years, fundamental blocking patents are not likely to be granted. ECD hopes that through the grant of the waiver, it may carve out a proprietary niche for ECD that it can leverage in its commercialization efforts. Grant of the waiver should not inhibit competition within the hydrogen ICE industry, but should have a positive effect on competition and market concentration.

The subject cooperative agreement will be modified to add the Patent Rights—Waiver clause in conformance with 10 CFR 784.12, wherein ECD has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which ECD agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, ECD agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.



Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.

Mark P. Dvorscak

Assistant Chief Counsel Intellectual Property Law Division

Date: 00 31 200

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

APPROVAL:

Paul A. Gottlieb / Assistant General Counsel for Technology Transfer and Intellectual Property, GC-62

Date: 3 -11-05

CONCURRENCE:

George Rudins
Deputy Assistant Secretary
Office of Fossil Energy
Coal and Power Systems

Date: 3/3/05



(t) U. S. COMPETITIVENESS The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.

WAIVER ACTION - ABSTRACT

W(A)-04-026 (CH-1195)

REQUESTOR

CONTRACT SCOPE OF WORK

RATIONALE FOR DECISION

DISPOSITION

Energy Conversion

Clean Hydrogen Technology for 3-Wheel Transportation in India

66% cost sharing

Devices, Inc. Under DOE Cooperative

Agreement No. DE-FC26-04NT42060